

CLAIMS

WHAT IS CLAIMED IS:

1. A method for limiting processor utilization by a virus scanner operable to scan data for viruses, the method comprising:

5 defining a processor utilization level;

 running the virus scanner;

 temporarily suspending running of the virus scanner such that usage of the processor is generally limited to said processor utilization value.

10 2. The method of claim 1 wherein running the virus scanner comprises executing a scanner thread.

 3. The method of claim 2 wherein suspending the virus scanner comprises executing a control thread operable to suspend execution of the scanner thread.

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4. The method of claim 1 wherein defining a processor utilization value comprises defining a maximum value and temporarily suspending running of the virus scanner limits said processor utilization value to said maximum value.

5 5. The method of claim 4 further comprising executing a control thread over a sampling period.

6. The method of claim 5 wherein suspending the running of the virus scanner comprises suspending the virus scanner for a suspend time period equal to
10 the sampling period multiplied by one minus the maximum processor utilization value.

7. The method of claim 5 wherein running the virus scanner comprises
executing a scanner thread for a time period equal to the sampling period minus
15 the suspend time period.

8. The method of claim 1 wherein defining a processor utilization level comprises defining an average value.

9. The method of claim 8 further comprising executing a control thread over a sampling period.

5 10. The method of claim 9 further comprising measuring the amount of time that a scanner thread was executing during a run period within the sampling period and calculating a suspend/run ratio based on the time that the scanner thread was executing.

10 11. The method of claim 10 further comprising adjusting a suspend time for the virus scanner with the suspend/run ratio.

12. The method of claim 1 wherein the virus scanner is an on-demand scanner.

15 13. The method of claim 1 wherein defining a processor utilization level comprises displaying a dialog box on a screen of a computer to allow a user to select the utilization level.

14. The method of claim 1 wherein defining a processor utilization level comprises defining a default value.

15. A system for limiting processor utilization by a virus scanner
5 comprising:

a virus scanner operable to scan data for viruses;

a processor operable to execute a scanner thread to scan the data; and

a controller configured to temporarily suspend execution of the scanner
10 thread to limit processor utilization by the virus scanner.

16. The system of claim 15 further comprising a graphical user interface
configured to allow a user to enter a preferred processor utilization level.

17. The system of claim 16 wherein the preferred processor utilization
15 level is a maximum percent of processor utilization by the virus scanner.

18. The system of claim 16 wherein the preferred processor utilization
level is an average percent of processor utilization by the virus scanner.

19. The system of claim 15 wherein the virus scanner is an on-demand scanner.

20. The system of claim 15 wherein the controller is a control thread operable to instruct an operating system to suspend execution of the scanner thread.

21. A computer program product for limiting processor utilization by a virus scanner, comprising:

computer code that defines a processor utilization level;

computer code that runs the virus scanner;

computer code that temporarily suspends running of the virus scanner so that usage of the processor is generally limited to the processor utilization value; and

a computer readable medium that stores said computer codes.

22. The computer program product of claim 21 wherein the computer readable medium is selected from the group consisting of CD-ROM, floppy disk, tape, flash memory, system memory, hard drive, and a data signal embodied in a carrier wave.

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23. The computer program product of claim 21 further comprising code that displays a graphical display to a user requesting the user to define the processor utilization level.

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